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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,974	05/13/2002	Andrea Heilemann	H 4172 PCT/US	4429
23657	7590	03/17/2004	EXAMINER	
COGNIS CORPORATION PATENT DEPARTMENT 300 BROOKSIDE AVENUE AMBLER, PA 19002			KRISHNAN, GANAPATHY	
			ART UNIT	PAPER NUMBER
			1623	

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,974

Applicant(s)

HEILEMANN ET AL.

Examiner

Ganapathy Krishnan

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

The Amendment filed November 24, 2003 has been received, entered into the record and carefully considered. The following information provided in the amendment affects the instant application:

1. Remarks drawn to rejections under 35 U.S.C. 102(b).

Claims 19-38 are pending.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 19-23, 25, 26 and 29-37 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-25 and 28-37 of copending Application No. 10/030933 ('933 application). Although the conflicting claims are not identical, they are not patentably distinct from each other because: Claims 19-23, 25, 26 and 29-37 are drawn to a process for preparing a

crosslinker-free composition comprising: providing an aqueous mixture of chitosan having a viscosity of from 1000 mPas to 100,000 mPas, combining a precipitant with the aqueous mixture to form a crosslinker-free composition and drying to form a three dimensional structure, with dependent claims reciting specific pH, precipitants and auxiliaries and additives and cosmetic compositions and food additives comprising the crosslinker-free chitosan composition.

Claims 19-25 and 28-37 of the copending '933 application recite the same limitations except that the claims are drawn to a biopolymer and the pH range recited is broader. A patentable distinction is not seen.

It would be obvious to one of ordinary skill in the art that the process and composition claimed in the copending application ('933) and the instant application are substantially overlapping. The process and compositions of the instant invention must contain new and distinguishable measures over the copending application to be patentably distinct.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

Claims 19-23, 25-28, 32-35 and 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 01062302 ('302 patent) is maintained for reasons of record.

Applicant's argue that the '302 patent teaches slow neutralization of an acidic solution to prepare a neutralized solution of chitosan salt and that the '302 patent is not directed to the production of entangled, three-dimensional, physically cross-linked chitosan product. This argument is not found persuasive.

The instant claims are drawn to a process for preparing a cross-linker free composition comprising an aqueous mixture of chitosan and combining a precipitant with the aqueous mixture to form a cross-linker free chitosan composition and drying the composition to form a three dimensional structure. The '302 patent teaches the same process steps. Hence, process of the '302 patent is seen to produce a crosslinker free three-dimensional chitosan product.

The allowability of claims 31 and 36 and the objection to claim 24 are withdrawn and the following rejections are made of record.

Claims 24, 31 and 36 rejected under 35 U.S.C. 102(b) as being anticipated by Chiba et al (JP 01062302, english translation).

JP 01062302 discloses a chitosan salt that is soluble in water at a pH of about 6-8 and is produced by neutralizing an acid solution of the chitosan with carbonate. In particular, the acid solution is obtained by mixing an organic acid (e.g. formic acid, acetic acid, lactic acid or sulphamic acid) or an inorganic acid (hydrochloric or nitric acid) with the chitosan and dissolving this mixture in water. The precipitant used is a carbonate (ammonium (bi) carbonate, sodium (bi) carbonate, potassium (bi) carbonate or calcium (bi) carbonate). The neutralized aqueous solution is then freeze-dried. The viscosity of the aqueous mixture of chitosan is inherent. Addition of the acid to chitosan forms the acid addition salt (the amine nitrogen in chitosan is quaternized and is positively charged). This salt is a cationically derivatized chitosan. This is then combined with the precipitant and subsequently freeze-dried. The process steps of Chiba et al is same as the ones recited in the instant claims and is seen to produce crosslinker-free chitosan as

instantly claimed. The art recognizes acid addition salts referred to above as cationically derivatized (see US 5059685, col. 2, lines 30-53).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kawamura et al US 4833237 (see col. 5, line 22 through col.6, line 21).

Conclusion

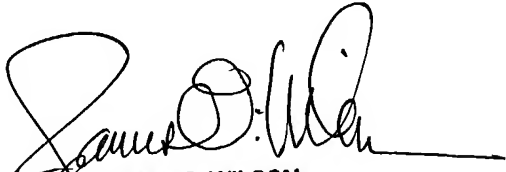
1. Claims 19-38 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 571-272-0654. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GK


JAMES O. WILSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600